

Resource Management and Sustainable Development: A Study of Pharmaceutical Firms in South East, Nigeria

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ABSTRACT

This study assessed the effect of resource management on sustainable development in pharmaceutical firms in South East, Nigeria. The specific objectives are to ascertain the effect of; inventory management, and project resource management on sustainable development in pharmaceutical firms in South East, Nigeria. The study adopted survey research design since it involves distribution of questionnaire to the target respondents. The population of the study comprised of branches of pharmaceutical firms in South East State, Nigeria. Regression analysis was used to analyzed the data and test the formulated hypotheses with the aid of SPSS version 20. 0. at 5% level of significance. Based on the analysis of the data, the summary of the findings were that inventory resource management and project resource management have a significant positive effect on sustainable development in pharmaceutical firms in South East State, Nigeria. Based on the findings, the study concludes that resource management has a positive and statistically significant effect on sustainable development in Nigerian pharmaceutical firms. Thereby, recommended among others that in order for firms to improve their storage system and proper control management should needs to implement inventory control management system. Also employers should enlighten on the control inventories for effective and efficient in improvement of organization performance.

KEYWORDS: *Inventory management, Project resource management and Sustainable development*

INTRODUCTION

Nigeria is the most vibrant black nation in the world with over 178, 841,235 million people Country measures (2015); it's located in western region of sub Saharan Africa. Nigeria is a eclectic society with over 250 racial groups and languages. The country is blessed with multitudinous natural resources among which are crude oil painting oil, gold, barrel, coal, iron ore, limestone and multitudinous others. These resources are important goods in the international request and therefore keep the economy going by being source of foreign exchange to the government. These resources are used to satisfy mortal wants and because they are sources of foreign exchange, they affect the overall performance of the government and therefore contribute to the growth and profitable development which affect the standard of living in the country. Otokit (2008) defined resources as “a means of attaining a given social end”. resources therefore

mean that a commodity can satisfy mortal conditions (retain avail) or has the attributes of furnishing a means of livelihood. therefore, the word “resources” can't be limited to crude oil painting oil, gold, barrel, limestone and others, but also includes land for husbandry, gutters for fishing, clean air, timber for ecological life and so on.

Resource operation is the effective and effective deployment and allocation of resources to where they are demanded. Resources should be managed efficiently in order to help negative environmental impacts and schism. With good profitable operation, the decision maker will be suitable to recognize the resources that are scarce, and they will be suitable to put in place programs that will be sustainable to the present generation and future generations (Akanbi & Atanu, 2017). Also, “Resource Sustainability” has come a common word moment in the face of political

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up- haven, poverty, conditions etc. Sustainable resource use is seen as the implicit result for multitudinous international, indigenous and original problems (Mensah, & Castro, 2004). The Nigerian economy can develop if its resources are managed adequately to feed for the problems of over population, infrastructural decay, political/ racial extremity, pollution and adding communal growth without complimentary resources to meet with limited resources. The United Nation World Commission on Environment and Development (WCED) 1987 defined sustainability as the “development that meets the present generation without compromising the capability of the future generations to meet their own conditions moment, multitudinous associations integrate sustainability strategies into their business strategy and charge in order to survive and achieve a competitive advantage, thus showing the generality of sustainability to be a global business trend (Goni, Shukor, Mukhtar & Sahran, 2015). By espousing these business strategies and acting accordingly, associations meet the conditions of moment ’ s ’ stakeholders, while simultaneously perfecting and conserving mortal and natural resources for the future (Danijela, Marija, Marina, Tijana, & Vladimir, 2020).

The growing significance of sustainability and its wider variety of issues affecting and impacting stakeholders with different values, has initiated a debate on the applicable motivators and issues that give guidance towards sustainability performance, assessment and improvement in the erected terrain (Kwawu & Elmualim, 2019). Still, poor resource operation is one of the causes of poor structure and low per capita income in the country. This has negatively affected peace and security in Nigeria, and therefore needs to be addressed. According to Onigbinde (2008), the notion of natural resources curse is nearly linked to poor resource operation as it increases recession and conflict, rather than profitable growth and development”. Corruption and mismanagement of the wealth from these resources are some of the factors causing poor resource operation in the country.

Nigeria faces numerous concurrent challenges in the operation of resources. These challenges include a rising population, changing livelihoods and prospects, climate change and rapid-fire- fire urbanization. These challenges produce pressures among resource stoners. The study of Danijela, Marija, Marina, Tijana & Vladimir (2020), revealed that the operation of design operation methodologies promotes the prolusion of sustainability confines while Fadahunsi, Utom, Ochim, Ayedun & Oloke (2019) concludes that installations operation had a significant effect on hotel service delivery in south east Nigeria and the

benefit of espousing installations operation principles in Covenant University.

The relationship between resource operation and sustainable development has been the subject of numerous studies of a similar nature, but only a small number of studies have linked the broad orders of resource operation and their contributions to sustainable development in terms of force, environmental/ natural, systems, installations, and other areas. Also, there isn't important disquisition of this kind being done by pharmaceutical companies. Manufacturers were the main subject of utmost examinations. Therefore, actors in all sectors have had torn- plan their business associations as a result of the dynamic developments in Nigerian pharmaceutical enterprises. The operations include addressing firm connection backups, lowering functional costs, perfecting pay and agreement systems, etc. Through invention, it generates the demand for respectable Resource Management procedures.

Lower attention has been paid to further- position issues, despite the fact that a vast body of work concentrates on macro position sustainability challenges (climate change, operation of natural resources). As vital interceders in creating a sustainable economy, force, installations, systems, natural resources, and the suchlike are some samples of some of the pivotal resources that are managed. predicated on the below background, this study intends to assess the effect of resource operation on sustainable development in pharmaceutical enterprises in South East, Nigeria.

The study assesses the effect of resource operation on sustainable development in pharmaceutical enterprises in South East, Nigeria. Specifically, the study intend to

1. Ascertain the effect of force operation on sustainable development in pharmaceutical enterprises in South East, Nigeria.
2. Inquiry the effect of design resource operation on sustainable development in pharmaceutical enterprises in South East, Nigeria.

REVIEW OF RELATED LITERATURE

Resource Management

Resource operation is a pivotal element to exertion resource estimation and design mortal resource operation are essential factors of a comprehensive design operation plan to execute and cover a design successfully. As is the case with the larger discipline of design operation, there are resource operation software tools available that automate and help the process of resource allocation to systems and portfolio resource translucence including force and

demand of resources. The thing of these tools generally is to ensure that (i) there are workers within the association with demanded specific skill set and asked profile demanded for a design, (ii) decide the number and skill sets of new workers to hire, and (iii) allocate the pool to various systems. Within professional services and consulting associations, the effectiveness of these tools and processes is generally covered by measuring billable operation rate.

resources therefore transcend Mineral bents like gold, crude oil painting oil, limestone, barrel etc but also includes the clean air for man and beast, forestry for ecological life, Sea, health, Knowledge etc because they also satisfy mortal life. Zimmermann (1980) in Otokiti (2008) sees resources as functional, and it does not relate to a thing or substance, but to a function which a thing or substance may perform or to an operation of attaining a given end analogous as satisfying a want. From this description, a factor analogous as gold, limestone, crude oil painting oil and so on will continue to be booty- trapped, as long as it satisfies mortal wants but cease to be resources when it can no longer satisfy mortal want therefore getting a “neutral hand”. Since resources have the capability to satisfy mortal wants, there is need to manage them in an effective and effective way so that sustainability will be achieved within the limit at of the global terrain. Steiner, Stark, Pilz & Hutterer (2000) maintain that resources can be defined according to their juvenescence rate

1. Renewable resource like food, timber and wildlife, for resources to be sustainable, the consumption rate should be maintained within the capacity of the natural system to regenerate (renew) in a mortal applicable period.
2. Semi-renewable resources; these are resources that are in their intermediate state of their possibility to renew or to deplete
3. Non-Renewable resources like mineral oils and gas, coal, gold etc. Their use as material and energy source lead to reduction of the earth's reserves, and are characterized that they do not renew in mortal applicable period.

Inventory Management

Inventory operation is the supervision of force and stock particulars or can be defined as process of efficiently overseeing the constant flux of units into and out of an being force. Reph & Milner (2015) defined force operation as “process of directing and administering the holding, moving and converting of raw paraphernalia through value adding processes to deliver finished products to the customer” force as a party of association means where by operation come concerned with the force stock. force appertained as a

stock of paraphernalia that used to grease in manufacturing of goods or to satisfy customer conditions. According to Chitale and Gupta (2014) in runner 133 says “force is defined as sum of the value of raw paraphernalia, energy and lubricants, spare corridor, conservation consumable, semi reused paraphernalia and finished goods, stock at a given point of time”. So managing inventories is important to association because it help in proper planning of the paraphernalia demanded so as to identify the gap between the asked and the factual position of paraphernalia, allocation of resources, copping, deals and employment of staff and everything concerned to mortal resources operation all of which reduces on the costs incurred by the association in the product departments for bettered performance of the association. Some of financial institutions put further sweats in cash forget about managing inventories. Institution should safe guards the establishment's force to clear procedure and regulations to be developed so as to help any felt inventories. Effective force control operation system enables for association to meet customer expectation of product, minimization of cost and maximization of profit. A force control operation system is the combination of attack and software that is technology, processes and procedures that help to cover and conservation of grazed products like company means, raw paraphernalia, finished productive to final consumers. A system in force includes barcodes, labels or means marker. In other hand force control operation system is also known as force control system. According to Indira (2018) in runner 69 says “force control systems are technology results that integrate all aspects of association's inventories tasks, including shipping, copping, entering, storage storage development, shadowing and reordering”

Chitale and Gupta (2014) describe force in financial parlance as “force is the sum of the value of raw paraphernalia, powers and lubricants, spare corridor, conservation consumables, semi reused paraphernalia and finished goods stock at any given point of time”. Therefore they concluded by assaying that force or stock facilitates guests' demands. All businesses and institutions bear inventories because they are substantial part of total means. It's important to hold force because it's a major part of ongoing business operation, covers finished products awaiting dispatch to guests, goods awaiting point of trade display, scrap and other arising and packages held pending return to suppliers. According to Reph & Milner (2015) in runner 7 the end of hold association is to have the right amount, in the right place, at the right time and the right cost. force covers all goods and

paraphernalia that an association owns or holds which business intends to add value before dealing.

Project Resource Management

Changes are usually introduced through projects Obradovi (2010), and the integration of sustainability and project management concepts can contribute to genuine changes in thinking, operations, cooperation, and partnerships on different levels of business and organization (Schipper & Silvius, 2017). Due to the fast and unexpected changes that occur in any environment or part of a system, a sustainable project should be able to embrace changes (Morfaw, 2014). Many economic, social, and environmental benefits are associated with certain projects (Wiek, Ness, Schweizer-Ries, Brand, & Farioli, 2012). Zamojska and Prochniak (2017) stressed that some projects provide a positive economic benefit, but all of them should provide positive social and environmental impacts. Michaelides, Bryde and Ohaeri (2014) indicate that important project outcomes are the results of sustainable project management practices: Easier access to capital markets in the future, high customer loyalty, improvements in a supply chain, the development of capabilities, and improvements in operational performance and efficiencies in the long term, positive organizational image and credibility, among other things. Morfaw (2014) argues that the effective and efficient management of the sustainable project processes requires a complex mix of different economical, societal, and environmental utilities, such as systems, structures, plans, resources, laws, regulations, technologies, etc. Moreover, it is necessary to ensure that sustainable project objectives are aligned with societal objectives (Morfaw, 2014). Sustainable project management is an accelerated roadmap to sustainable development. The way our future will look depends significantly on project managers, since the challenges relating to sustainability are quite concrete and rely on the adequate planning and implementation of projects, which can guarantee the protection of world resources and, at the same time, create welfare for people (Silvius, Schipper, Planko, van der Brink & Köhler, 2012). Chofreh, Goni, Malik, Khan and Klemeš (2019) state that introducing sustainability into project management concepts and methods should support organizations in achieving a competitive advantage. However, Banihashemi, Hosseini, Golizadeh and Sankaran (2017) argue that while many organizations take the initiative to incorporate sustainability, many of them still fail to manage projects, because they employ conventional project management. Sustainable project management can be defined as “the planning, monitoring, and controlling of project delivery and support processes, considering

the environmental, economic, and social aspects of the life cycle of a project’s resources, processes, deliverables, and effects, with the aim of creating benefits for stakeholders in a transparent, fair, and ethical way that includes proactive stakeholder participation” (Silvius, & Schipper, 2014).

Corporate Sustainability development

In reference to the concept of sustainable development (SD), Corporate Sustainability can be defined as meeting the needs of a firm’s direct and indirect stakeholders without compromising its ability to meet the needs of future stakeholders as well (Dyllick & Hockerts, 2002). At the organizational level, this concept of SD has been translated to CS, which “entails the preservation, regeneration, and development of the ecological, economic and social resources of a system” (Senna & Shani, 2009). As such, CS can be considered as the process of organizational change, i.e., sustainability driven change. The purpose of this change is to move the organization to the state in which equally distributed attention to economic, social, and environmental concerns is incorporated into its strategy. Ultimately, sustainability-driven change has the purpose of transforming an organization into an active agent for sustainable development (Guerci, Decramer, van Waeyenberg & Aust, 2019).

The modern conception of economic growth presents development as a vehicle driven by four wheels viz: capital, labour, resources and technology (Nordhaus 2013). Sustainable development which aims at the creation of sustainable improvements in the quality of life for all and sundry is therefore principal goal of development policy (Jhingan 2013). At the heart of sustainable development is natural resource management which has become inevitable because of the conflicts between the short-term need to alleviate poverty and the long-term objectives for environmental sustainability. In the third world, pressures placed on natural resources to meet people’s demands, presents a dilemma for policy makers concerned with sustainable development (Cahill & Fitzpatrick, 2012). All the same, the desirability of policies which carry long-term costs to both society and the environment cannot be over-emphasized. Developing such policies which are expected to enhance public good and social welfare is a herculean task because of the exigency of accommodating long-and-short-term goals for sustainability and the political conditions which border on issues of ownership and the participation of stakeholders commonly with conflicting interests in the policy-making process (Ejumudo, 2005). Ordinarily, the need to take into cognizance the

environmental factors in analyzing such policies are increasingly being recognized (Huby, 2012; George and Wilding 2013; Cahill 2013). In Nigeria, the need for a pragmatic, action-based on multi-dimensional approach to integrated and functional policies that will enhance constant sustainable development is even more compelling. This is largely due to the policy gaps, policy disconnection and the action dilemma typified by governmental inaction and poor commitment, weak institutional capacity in the face of the unholy alliance between the government and the lackadaisical attitude, poor predisposition, responses and participation by corporate bodies, communities and individuals in Nigeria (Ejimudo, 2015). Mensah and Castro (2004) stated that sustainability involves solutions for human welfare that does not result in degrading the environment or impinging on the wellbeing of other people. World Commission on Environment and Development (WCED (1987) define it as development that meets the need of the present without compromising the ability of the future to meet their own needs. Before sustainability can be achieved, revenue gained from the sale of these resources must be used for development so as to cater for the need of future generation.

Empirical Review

Danijela, Marija, Marina, Tijana and Vladimir (2020) examined whether project management methodologies, applied in different sectors, support the introduction of sustainability dimensions. Using descriptive statistics, the findings reveal that the application of project management methodologies promotes the introduction of sustainability dimensions, particularly the social aspect, irrespective of the sector, since the processes in projects managed by a specific methodology are consistent with the social elements of sustainability. Stefano, Rosa, Fabio and Alessandro (2019) contributed to the current research knowledge through a systematic review of the literature on the integration of project management and sustainability. Specifically, the aim was to clarify the research domains of sustainable project management, and to understand the current state of development and the future research directions. The Results indicate that academic literature about this topic is still in its infancy, but that scholars' attention is growing, opening new research directions. Obegi and Kimutai (2017) assessed resource scheduling and project performance of international not-for-profit organizations in Nairobi County, Kenya. Using simple random sampling the study sampled 50% of the INGOs operating from Nairobi County, giving a total of 94 INGOs covered by the study. Questionnaires were administered to 94

Project Managers from each of the INGOs that were sampled. Archival information was also collected from project performance reports. The researcher sought the opinion of experts including the supervisor and peers in counter checking the validity of the questionnaire. Using linear regression model and analysis of variance, the study found that there exists periodic budget monitoring to measure expenditures against budget; Project staff complete their assignments as allocated. Ogonu, Ikegwuru and Nwokah (2016) investigated the linkage between the determinants of inventory Management and customer satisfaction within the context of supermarkets in Nigeria The study adopted quantitative approach, using-item, five point likert scaled questionnaire administered to 500 participants with 80 percent usable response rate. Data was analyzed using Cronbach's an internal consistency and Spearman's ranking correlation statistic. The study found that Inventory Management System emerged as the most significant positive impact on customer satisfaction, whereas information technology was found to have a strong positive impact on customer loyalty. Kwadwo (2016) examined the impact of efficient inventory management on the profitability of manufacturing firms in Ghana. The study adopted the cross-sectioned design and employed the use of secondary data. The data gathered covered the period 2004-2014 from the annual reports of four manufacturing companies listed in Ghana stock Exchange (GSE). Measures of profitability were examined and linked to proxies for efficient inventory management by manufacturers. The ordinary least square (OLS) that came in the form of multiple regression models was employed in data analysis. The study found out that there is a significantly strong correlation between inventory management and profitability of manufacturing firms in Ghana. Agu (2016) ascertained the extent at which inventory control affects the productivity of selected manufacturing firms, to determine the nature of the relationship between demand management and customer satisfaction of selected manufacturing firms in Nigeria. The descriptive survey research design was adopted for the study. The hypotheses were tested using Pearson product moment correlation coefficient and simple linear regression statistical tools. The findings indicated that inventory control significantly affects productivity of selected manufacturing firms. Nwangangi, Guyo and Arasa (2015), researched on how inventory management influenced the performance of manufacturing firms in Kenya. The research design adopted was both descriptive and explanatory. Data was collected from heads of logistic department of 320 firms through the use of

questionnaire. A pilot study was conducted to test for validity reliability and practicability of the research instruments Descriptive static's such as parentages and frequencies was used, while the inferential statistics used was the linear regression. The findings revealed that improvement in inventory management by one unit will lead to increase in marketing performance, of financial performance and customer satisfaction by 0.300, 0.423 and 0.143 units respectively. The study also found that inventory management influences all the constructs of measuring firm performance (Market performance, financial performance and customer satisfaction). Nsikan, Etim and line (2015) determined the inventory management practices in flour mills manufacturing firms with aggregate staff population of 2569 which constituted the unit of study. Questionnaire was used as the major source for data collection. The mean and standard deviation was used to analyze descriptive data. Results indicates that in exception of the large manufacturing companies, most of the medium-sized flour milling firms adopts different inventory management strategies and polices based on factors such as changing level of customer demand, prevailing industry practices, forecast estimates and guesses, and available production capacity. Sitienei and Memba (2015) determined the effects of inventory management on the profitability of the Cement manufacturing firms in Kenya. A cross sectional data from 1999 to 2014 was gathered for the analysis. The ordinary least squares (OLS) stated in the form of a multiple regression model was applied in the data analysis to establish the relationship between inventory management and firm's profitability. The results provided a negative relationship between inventory turnover, inventory conversion period and storage cost with profitability of the company. In addition, inventory level was found to be directly related to firm's size and storage cost. Nwosu (2014) examined the impact of materials management on profitability of Nigeria brewing companies using a sample size of 368 companies. The study used questionnaire and oral interviews to collect data. Using regression analysis, the study established that materials procurement and storage has significant effect on profitability of brewing companies. The study also found that materials inventory has a significant contribution to profitability of brewing companies; and that interdepartmental collaboration significantly contributed to the profitability of brewing firms. Lwiki, Ojera, Mugenda and Wachira (2013) examined the impact of inventory management practices on the financial performance of sugar manufacturing firms in Kenya. The research survey

was conducted in eight operating sugar manufacturing firms from the period 2002- 2007. Descriptive statistics was used to test the impact of inventory management practices and Correlation analysis was used to determine the nature and magnitude of the relationship among inventory management variables. The results indicate that there exists a positive correlation between inventory management and Return on Sales and also with Return on Equity which were found to be statistically significant at 5% level. Anichebe and Agu (2013) assessed the impact of proper inventory management on performance of organizations in Nigeria.. Using regression analysis, the study findings established a significant relation between inventory management and effectiveness in an organization. The study also established that inventory management had a significant effect on productivity of an organization and there was a strong positive correlation between inventory management and profitability of an organization.

Some of the empirical literature found that, a good number of similar studies had been conducted in foreign countries concerning the resource management and sustainable development, but there is no study that identifies the broad aggregates of resource management, and their contributions towards sustainable development, in terms of environmental/natural, projects, facilities, besides there is a limited study of this nature in the pharmaceutical firms.

METHODOLOGY

Research Design

The study adopted a survey research design since it involved distribution of questionnaire to the targeted respondents. This is in line with Nworgu (2009) who reported that survey research design is appropriate in testing the associations between two or more variables or set of scores.

Population of the Study

The population of the study consists of branches of pharmaceutical firms in South East State, Nigeria. The rationale for choosing firm staff as the respondents of this study is based on the fact that they are part of principal actors in sustainable economic activities and better informed in terms of resource management (See appendix 1).

Determination of Sample Size

Purposive sampling technique applied in determining the sample size. In this method, ten (10) staff was chosen from each of the ninety two (92) pharmaceutical firms in South East states during the data collection process. Since the research is a survey designs that needs people's opinion, the researcher

chose these firms in order to administer questionnaire to the respondents. The total number of staff was 920.

Method of Data Collection

The questionnaire was structured on five point likert scale of Strongly Agree (SA); Agree (A); Undecided (UN), Disagree (D); and Strongly Disagree (SD), to give the respondents choice of ticking most perceived option. The researcher visited the firms with some assistants to administer the questionnaire.

Validation of the Instrument

Validation of the instrument was conducted by giving same to two experts: My supervisors, and two staff of Business Administration in the University. They examined the questionnaire items and made necessary corrections. The corrections were effected in the final draft of the instrument.

Reliability of the Instrument

To check the reliability of the instrument, the questionnaire was pre-test through pilot study to determine its effectiveness in soliciting information intended. The researcher used test-retest method to determine the reliability of the research instrument. Copies of the research instrument were restricted on a sample of fifteen respondents who were representative draw from pharmaceutical firms in South East.

Cronbach Alpha reliability test was employed in the analysis due to the nature of the instrument. After the analysis, various aspects of the following coefficient alpha for the five sections as presented in Table 1 below with the overall coefficient alpha of 0.99. Also, the coefficient alpha for corporate sustainable development was 0.95. Hair, Sarstedt, Hopkins and Kuppelwieser (2014) and Wong (2013) recommended that an internal consistency greater than (>0.70) should be considered a good measurement. Therefore, the Cronbach Alpha values were considered high enough and the instruments considered reliable.

Method of Data Analysis

To test the significant effect and dependent variable and independent variables, Regression analysis should be used to test the formulated hypotheses with

Data Analysis

the aid of SPSS version 20. 0. at 5% level of significance.

Decision Rule:

The decision for the hypotheses is to accept the alternative hypotheses if the p-value of the test statistic is less or equal to the alpha at 5% and to reject the null hypotheses if the p-value of the test statistic is greater than alpha at 5% significance level.

Model Specification

The study adopted Olorunsola (2013) job satisfaction model was used to test the job satisfaction and components of job satisfaction.

By the Olorunsola (2013) Model, the following regression equation can be derived from the model.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \mu$$

Where

Y = Sustainable Development

X1 = Inventory resources management

X2 = Project resource management

Where:

Y = Sustainable development (dependent variable)

X = Resource management (explanatory/independent Variable)

β_0 = constant term (intercept)

β_1 - β_1 = Coefficients of sustainable development

μ = Error term (stochastic term)

Explicitly, the equation can be defined as:

Resource management = f (Sustainable development) + μ

Representing the equations with the variables of the construct, hence the equations below are formulated:

$$SUDEV_{it} = \beta_0 + \beta_1 IRM_{it} + \mu_{it} \quad - \quad i$$

$$SUDEV_{it} = \beta_0 + \beta_2 PRM_{it} + \mu_{it} \quad - \quad ii$$

Where:

β_0 = Constant term (intercept)

β_{it} = Coefficients to be estimated for firm i in period t

μ_{it} = Error term/Stochastic term for firm i in period t

ANALYSIS AND RESULTS

Out of 930 copies of questionnaires distributed 631 were completed and returned. This represents 69%.

Table 2: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SUDEV	5	73.00	1667.00	631.0000	623.75997
IRM	5	79.00	1653.00	631.0000	631.99723
PRM	5	70.00	1651.00	631.0000	616.45559
Valid N (list wise)	5				

From the descriptive statistics of the variables shown, the mean value of 631.00, sustainability development (SUDEV) shows maximum and minimum values of 1667.00 and 73.00 respectively. The standard deviation stood at 623.76. The mean value for inventory resource management (IRM) has maximum and minimum values

of 1653.00 and 79.00 respectively while the standard deviation is 631.00. Project resource management (PRM) has maximum and minimum values of 1651.00.0 and 70.00 respectively while the standard deviation is 616.46.

Test of Hypotheses

Hypothesis One

H₀₁: Inventory resource management has no significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria.

H₁₁: Inventory resource management has a significant positive effect on sustainable development in pharmaceutical firms in South East Nigeria.

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.996 ^a	.992	.989	65.46697

a. Predictors: (Constant), IRM

Table 3 above shows that the coefficient of determination is $R^2 = 0.992$ and the Adjusted R^2 is 0.989. Adjusted $R^2 = 0.99$ implies that about 99% of change in sustainable development of the sampled pharmaceutical firms is influenced by joint interaction of inventory resource management. It also shows that 1% of the variation in the dependent variable is explained by other factors not captured in the study model.

Table 4: ANOVA^a

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1543448.227	1	1543448.227	360.120	.000 ^b
Residual	12857.773	3	4285.924		
Total	1556306.000	4			

a. Dependent Variable: SUDEV

b. Predictors: (Constant), IRM

Table 5: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10.802	43.878		.246	.821
	IRM	.983	.052	.996	18.977	.000

a. Dependent Variable: SUDEV

From table 4 and 5, the goodness of fit shows that the regression equation or model that was used to predict sustainable development is highly significant at 5% level of significance (p -value = 0.000).

The test of hypothesis of whether inventory resource management (IRM) significantly affects sustainable development of pharmaceutical firms in South East, Nigeria shows a positive correlation between inventory resource management and sustainable development ($\beta_1 = 0.983$). In addition, the probability value for IRM is 0.000 which is less than 0.05. Thus, the alternative hypothesis is accepted which says that there is a positive significant effect between inventory resource management and sustainable development of pharmaceutical firms in South East, Nigeria at 5% level of significance (p -value < 0.05).

Decision

Based on the empirical evidence, this study upholds that inventory resource management has a significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria at 5% level of significance; hence, H₁ is accepted.

Hypothesis Two

H₀₂ Project resource management has no significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria.

H₁₂ Project resource management has a significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria.

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1.000 ^a	1.000	1.000	8.66436

a. Predictors: (Constant), PRM

Table 6 above shows that the coefficient of determination is $R^2 = 1.000$ and the Adjusted R^2 is 1.000. Adjusted $R^2 = 1.000$ implies that about (all) 100% of change in sustainable development of the sampled pharmaceutical firms is influenced by joint interaction of project resource management. It also shows that none of the variation in the dependent variable is explained by other factors not captured in the study model

Table 7: ANOVA^a

	Model	Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	1556080.786	1	1556080.786	20728.061	.000 ^b
	Residual	225.214	3	75.071		
	Total	1556306.000	4			

a. Dependent Variable: SUDEV

b. Predictors: (Constant), PRM

Table 8: Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-7.431	5.889		-1.262	.296
	PRM	1.012	.007	1.000	143.972	.000

a. Dependent Variable: SUDEV

From table 7 and 8, the goodness of fit shows that the regression equation or model that was used to predict sustainable development is highly significant at 5% level of significance (p -value = 0.000).

The test of hypothesis of whether project resource management (PRM) significantly affects sustainable development of pharmaceutical firms in South East Nigeria shows a positive correlation between project resource management and sustainable development ($\beta_1 = 1.012$). In addition, the probability value for PRM is 0.000 which is less than 0.05. Thus, the alternative hypothesis is accepted which says that there is a positive significant effect between project resource management and sustainable development of pharmaceutical firms in South East, Nigeria at 5% level of significance (p -value < 0.05).

Decision

Based on the empirical evidence, this study indicated that project resource management has a significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria at 5% level of significance; hence, H_1 is accepted.

Discussion of Findings

Based on the empirical evidence, hypothesis I upheld that inventory resource management had a significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria at 5% level of significance; hence, H_1 was accepted. This result is in line with Anichebe and Agu (2013) whose findings established a significant relationship between inventory management and effectiveness in an organization, and also, Oko, Mgbonyebi and Umeadi (2008) revealed a significant relationship between inventory control and business growth. However, Roumiantsev and Netessine (2005) result negate the finding and shows that no evidence that smaller relative levels are associated with financial performance with inventory.

Hypothesis II indicated that project resource management had a significant positive effect on sustainable development on pharmaceutical firms in South East, Nigeria at 5% level of significance; hence, H_1 was accepted. This confirmed with

Danijela, Marija, Marina, Tijana and Vladimir (2020); Tefano, Rosa, Fabio and Alessandro (2019) who revealed that the application of project management methodologies promotes the introduction of sustainability dimensions, particularly the social aspect, irrespective of the sector.

CONCLUSION AND ECOMMENDATIONS

Conclusion

Sustainable development which aims at the creation of sustainable improvements in the quality of life for all and sundry is therefore principal goal of development policy. At the heart of sustainable development is resource management which has become inevitable because of the conflicts between the short-term need to alleviate poverty and the long-term objectives for environmental sustainability. This study however, assessed the effect of resource management on sustainable development in pharmaceutical firms in South East, Nigeria. To test the significant effect and the relationship between the dependent variable and independent variables, Regression analysis was used to test the formulated hypotheses with the aid of SPSS version 20.0. at 5% level of significance. From the result of the analysis, the study revealed that Inventory resource management, Environmental resource management, Project resource management, Facility resource

management and Financial resource management have significant positive effect on sustainable development in pharmaceutical firms in South East, Nigeria at 5% level of significance. Conclusively, resource management has significant positive effect on sustainable development in Nigerian pharmaceutical firms.

Recommendations

Based on the findings of the study, the researcher recommended the following;

1. It was recommended that in order for firms to improve their storage system and proper control management, they should needs to implement inventory control management system.
2. There is a noticeable lack of knowledge of the meaning and dimensions of sustainability and, accordingly, an urgent need for project managers to gain knowledge and skills pertaining to sustainable project management.

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